Strategic Plan for Asthma in California
2007-2012

Introduction

Five goal areas are proposed, each with a specific goal statement and objectives and strategies designed to meet the intent of the goal statement. In addition, each goal statement will address the following critical cross-cutting priorities:

- Disparities;
- Policy;
- Institutional / systems change;
- Education / awareness;
- Lifespan focus on children, adults, and seniors

GOAL 1: Implementation, Monitoring & Evaluation of the Strategic Plan on Asthma and State Infrastructure Enhancements

Goal Statement

A coordinated and integrated infrastructure built upon public-private partnerships will exist within State and local sectors to support collaboration in implementing the Strategic Plan for Asthma in California and in monitoring progress and sustaining accomplishments.

Objectives and Strategies

1. Raise public awareness of asthma and the *Strategic Plan for Asthma in California*.

1.1. Promote the Plan to key stakeholders in the public and private sectors at the local, regional, state and national levels by, widely disseminating printed and electronic copies of the Plan; posting the Plan on the web and creating query mechanisms to enable rapid searches within the plan by sector (e.g. health care, schools) and types of intervention (e.g. systems change, policy change); and, meeting with policymakers, key decision makers and major grant makers to raise awareness of the Plan and to help ensure the Plan is put into action.

1.2. Conduct an effective public communication campaign to raise awareness of asthma, including consumer rights.

2. Develop a comprehensive and coordinated Asthma Program within the California Department of Health Services (soon to be the Department of Health Care Services and the Department of Public Health); one that collaborates with other departments and divisions at the State level. The new departments will coordinate the State Plan and its activities and will:

2.1. Develop an intra-Departmental and combined departmental coordinating structure that will clarify the working relationship and leadership roles of the two new departments and ensure a shared vision, common goals, and prioritized strategies.

2.2. Develop and support an inter-departmental work group comprised but not limited to California Department of Health Care Services (CDHCS), California Department of Public Health (CDPH), California Department of Education (CDE), California Environmental Protection Agency (Cal EPA) boards, departments and offices, California Occupational Safety and Health Administration (Cal OSHA), Department of Housing and Community Development, Community Care Licensing, Office of the State Architect, Cal Trans, and others.

2.3. Ensure adequate commitment of personnel, material, and financial resources for on-going implementation of the Plan.

2.4. Fully utilize existing data maintained by other departments and where appropriate, establish data exchange mechanisms and agreements between departments within the State of California for data relevant to asthma surveillance.

2.5. Ensure that leaders and policy makers are well informed on asthma in California, and are able to access public and private expertise regarding asthma-related issues, policy and legislation.

3. Develop and revise, as needed, work plans to meet goals and objectives outlined in the Strategic Plan for Asthma in California.

3.1. Identify specific strategies, measurable outcomes when possible, and time frames for objectives and goals. This process is on-going, given the iterative nature of the 5 year plan.

3.2. Identify departments and divisions within the State and local government that will be responsible for (or contribute to) accomplishing the stated Plan objectives.

3.3. Identify other organizations and entities in the public and private sectors at the local, regional, and state levels that agree to address (or contribute to accomplishing) specific Plan goals and objectives.

3.4. Encourage public and private agencies and asthma coalitions at the state, regional, and local levels to use the Plan to shape their own internal work plans and strategic planning.

4. Implement, monitor and evaluate the *Strategic Plan for Asthma in California* at the local and state levels.

4.1. Develop and support a committee that consists of multi-disciplinary representatives from the public and private sectors at the state, regional, and local levels to facilitate the implementation, monitoring and evaluation of the plan.

4.2. Hold a Statewide Asthma Summit every 18-24 months that brings together key constituents to assess the status of asthma in California, refine program and policy

directions, assess research, lay the groundwork for future activities, and to support an ever-growing asthma network within California.

5. Enable and empower local public and private organizations to implement the *Strategic Plan for Asthma in California.*

5.1. Support, expand, and strengthen local asthma coalitions and other coalitions that have goals in common with asthma throughout California. Support existing communication and technical support infrastructures, at the state and regional levels, for these coalitions and programs [i.e. Regional Asthma Management and Prevention (RAMP), Community Action to Fight Asthma (CAFA), California Asthma Public Health Initiative (CAPHI), Best Practices in Childhood Asthma (BPCA), and California Breathing (CB), tobacco control coalitions, nutrition and physical activity-related groups].

5.2. Develop mechanisms and guidance for locally based public and private organizations to work together with local public health departments, local school boards, local air districts, and others to advance the Strategic Plan by drawing on local expertise throughout the state, synthesizing best practices for such collaborations and promoting these best practices; funding local forums for public and private sectors to develop and/or strengthen collaborative relationships to improve asthma management and prevention; and, establishing a statewide internet portal to create an on-line asthma network for individuals, organizations, institutions and coalitions working to address asthma. It will provide an on-line opportunity to share successes and failures, discover best practices, and share the latest research in the field.

5.3. Maintain a single website/portal dedicated to Asthma in California that will include: current data on asthma; the strategic plan; work plans to carryout the strategic plan; updates on the implementation, monitoring and evaluation of the strategic plan; links to asthma organizations throughout California; information on asthma, educational resources, and best practices in relation to health care, schools, childcare, housing, workplace, and outdoor air.

5.4. CDHS (soon to be the Department of Health Care Services and the Department of Public Health)will build and maintain relationships with key organizations within California that actively engage in infrastructure development, programmatic and policy development and local and regional empowerment, such as the California Endowment, the Public Health Institute, the California Wellness Foundation, the Proposition 10 Commissions, etc.

5.5. Identify and develop adequate and sustained long-term funding mechanisms and sources for asthma services, programs, policy work and coalition work at the local and regional levels.

6. Interface, coordinate and collaborate with other states as well as national and international organizations on the prevention and management of asthma.

6.1. Participate in national and international initiatives and work groups pertaining to asthma, respiratory health, disparities, and/or air quality.

6.2. Collaborate with other public health movements such as but not limited to: universal health care; health care quality improvement, poverty reduction; income/wealth disparity reduction; smart growth; healthy communities; global warming; tobacco control; obesity and diabetes initiatives; the goods movement; sustainable energy; and green building to prevent and control asthma and other illnesses, and to create environments that will optimize health.

6.3. Present California's work on controlling asthma through programmatic actions, systems change, and policy change at state, national and international conferences and meetings.

6.4. Consider innovative and effective asthma practices from other states and countries in planning California's ongoing asthma efforts.

GOAL 2: Surveillance and Research

Goal Statement

California policy makers, health plan and health care providers, employers, and the public will understand the importance of asthma and its continued threat to the public health. Asthma data will be utilized to plan, implement and evaluate interventions, with particular attention to vulnerable populations.

Objectives and Strategies

1. Maintain and expand asthma surveillance in California at the state, county and sub county levels

1.1. Maintain timely access to the most up to date asthma surveillance data in California including incidence, prevalence, morbidity and mortality (see State of the State Report):

1.2. Survey asthma stakeholders at least every two years to assess the current status of asthma surveillance, to consider gaps and limitations in existing surveillance, and to identify strategic priorities for the expansion of asthma surveillance efforts.

1.3. Expand asthma surveillance in California. (Consider the list in Side Bar A)

1.4. Develop and adopt standardized measurements and definitions to characterize asthma prevalence, incidence, self-reported race/ethnicity, severity, morbidity, mortality, disability, asthma management measures, health care utilization, undiagnosed asthma, high risk populations, and asthma triggers and risk factors for surveillance of asthma in children, adults and workers**.**

2. Use surveillance data to target interventions that eliminate disparities in asthma prevalence, diagnosis, treatment and outcomes. Monitor progress.

2.1. Identify and monitor disparities in asthma burden and care in California, including at the state, county and sub-county level, exploring differences by age group, gender, race and ethnicity, income, education level, insurance status, geographic residence, occupation, primary language and literacy level.

2.2. Raise awareness of asthma disparities in California by highlighting information on disparities in all electronic and written reports on surveillance findings.

2.3. Identify strategies to collect data on work related asthma among California's most vulnerable workers, including day laborers, and migrant workers, who may not be represented in current data bases.

3. Develop necessary infrastructure in the Department of Health Services that provides organization, accessibility, integration, management, evaluation and linkage of asthma data.

3.1. Establish data exchange agreements and mechanisms between Departments within the State of California for data relevant to asthma surveillance (see Goal 1 objective 2.4).

3.2. Establish data sharing protocols and mechanisms for private and public stakeholder asthma data use.

3.3. Ensure public access to up-to-date asthma surveillance data and current peer reviewed literature through: a centralized, well-publicized web-site for all asthma surveillance data and findings; wide dissemination of the most current surveillance data and findings through annual reports and brief updates; and wide dissemination of a "State of Asthma in California" report every 3 years.

4. CDHS will establish collaborative partnerships with research institutions, health plans, health care providers, pharmacists, independent practice associations, medical groups, managed care providers, Medi-cal and Medicare, and others to identify a range of asthma research priorities, to study asthma and evaluate interventions for preventing and managing asthma.

4.1. CDHS will facilitate the development of a research agenda targeted at prevention and management of asthma that will include:

4.1. a. Reasons for asthma disparities and best practices for reducing or eliminating them

4.1. b. Workplace exposures that lead to asthma incidence, morbidity and mortality (Side Bar B for examples).

4.1. c. Indoor and outdoor environmental exposures that lead to asthma incidence, morbidity and mortality (Side Bar C for examples).

4.1. d. Asthma management strategies that lead to a reduction in asthma morbidity and mortality.

4.1. e. Identification and implementation of best practices in health care service delivery, at the levels of the individual practitioner, practice and plan insurance coverage.

4.2. CDHS will convene an asthma research symposium every two years to summarize recent important research findings, to assess their implications and to address current interests and research questions as suggested by stakeholders. (Side Bar D for examples of research areas to include)

5. Policy regarding asthma in California will be informed by analysis and interpretation of data.

5.1. Determining priority data to be collected will be guided by both availability and the need for developing and evaluating specific policies and interventions.

5.2. Data analysis, reports and key findings will be disseminated to policy makers, health care providers, employers and the public

5.3. Data will be identified, analyzed and interpreted to support policy development for goals 1-5 of this Plan.

5.4. In the absence of data, use expert opinion and the best available evidence to assess policy proposals and to guide policy development.

Side Bar A – Expanded Asthma Surveillance could include:
Regional information; county, sub- county, zip code and address level of resolution

Undiagnosed asthma

High risk individuals

Information on small populations and information related to disparities

Ongoing surveys on knowledge, attitudes, beliefs and practices of representative samples of childcare providers, teachers, coaches, school nurses, primary care doctors (e.g. pediatricians, family practitioners, internists, and emergency physicians) and other health care personnel

Asthma severity in school with asthma

School absenteeism related to asthma

911 calls from schools or other parts of the community

Managed care organizations (e.g. Kaiser Permanente and approximately 60 other managed care organizations in California)

Improved Medi-Cal and Medicare asthma data

Environmental determinants and influences of asthma (e.g. criteria air pollutants from Air Resources Board; Toxic Air Contaminants from Office of Environmental Health Hazard Assessment; traffic related pollutants from Air resources Board and Department of Transportation; and contaminated sites from Department of Toxic Substances Control)

Social determinants and influences of asthma (e.g. community violence and crime statistics from California Department of Justice; inequalities in income, wealth and employment; and environmental justice)

Inventory of known asthma triggers (hazard surveillance)

Addition of variables to existing data sources on adult asthma to capture occupation, industry and work-relatedness

CHIS measurements providing more detailed assessment of asthma management practices, history of documented allergies and home and occupational exposures

Side Bar B – Potential Workplace Asthma Research Areas

Determine high risk industries and occupations in California and research asthma in these areas.

Estimate the prevalence and incidence of new-onset asthma related to work

More accurately estimate prevalence and incidence of exacerbations of pre-existing

asthma related to work factors

Investigate the economic impact of work-related asthma in California in terms of lost productivity and direct health costs

Identify new asthma triggers and asthma causing agents

Expand institution -specific surveillance to include asthma hazards

Basic research regarding asthmagens and threshold levels

Side Bar C – Potential Indoor and Outdoor Research Areas

Conduct research related to traffic and air pollution; link data from the Air resources Board and the Air Quality Management Districts

Increase information related to differences in asthma and spatial and temporal resolution of environmental exposures

Research connection to global warming and air pollution

Conduct research on specific triggers, sensitizers, and irritants such as chemicals, pesticides, pollens, landscaping practices and fragrances

Side Bar D – Research Areas for Future Research Symposia

Medication use

Asthma and learning

Diet and asthma

Effectiveness of individualized student asthma action plans in the school setting

Barriers to treatment and management

Number of asthmatics who have been through a case management program

Effectiveness of promotoras in home assessments

Effectiveness of practice-based interventions

New understanding of genetic, proteonomic, metabolomic risk factors for asthma

New findings on the relationship of asthma to allergy, including food allergy

Surveillance of upstream (causes asthma) and downstream (aggravates asthma) risk factors

Etiologic research and the benefits of cross-silo communication and research

GOAL 3: Health Care

Goal Statement

Comprehensive, high quality, culturally appropriate, patient and family centered asthma care will be available to all people in California resulting in optimal prevention, diagnosis, treatment and management of asthma, at a minimum, consistent with national expert guidelines.

Objectives and Strategies

1. Develop and promote statewide implementation of "standards of asthma care" for the diagnosis and management of asthma in collaboration with California's public and private health care delivery and payer systems.

1.1. Convene representatives from the major public and private health care delivery and payer systems to establish, adopt and promote "consensus standards of asthma care". Establish standards that, at a minimum, are consistent with the National Heart Lung and Blood Institute's (NHLBI) *Guidelines for the Diagnosis and Management of Asthma*, the National Asthma Education and Prevention Program's *Key Clinical Activities for Asthma Care*, and the "Chronic Care Model". (Side Bar A NAEPP key clinical activities for asthma)

1.2. Promote comprehensive care management as the standard of care for individuals with persistent or high risk asthma. (Side Bar B)

1.3. Translate "consensus standards of asthma care" into a companion public education document and widely publicize.

2. Facilitate coverage and reimbursement for a comprehensive chronic disease management approach to asthma within public and private health care payer systems.

2.1. Identify and develop long-term funding for a comprehensive care management approach to asthma care and for health information technology in support of high quality asthma care.

2.2. Facilitate coverage and reimbursement for comprehensive care management by public and private health care payer systems in California for individuals with persistent and high risk asthma. Facilitate the establishment of a comprehensive current procedural terminology (CPT) code to be used when billing for comprehensive care and management. (Side Bar B)

2.3. Facilitate coverage and reimbursement for the following services and supplies for all individuals with asthma: lung function tests (spirometry) for asthma diagnosis and monitoring; allergen sensitivity assessment (either skin tests or in-vitro blood tests); primary asthma education; management and prevention supplies (inhaler spacers, pillow/mattress encasements); duplicate medication for children (one for home use and one for school/child care use).

2.4. Support community right to know efforts with regard to coverage for asthma drugs, devices and services by state health plans.

2.5. Design and post a model universal drug formulary for asthma.

3. Expand Quality Improvement (QI) for asthma care within public and private health care delivery and payer systems to assess, improve and sustain the provision of high-quality asthma care within and across systems.

3.1. Explore the potential to require all commercial health and non commercial care plans in California to adopt and report on the same HEDIS performance measures on asthma care[1] to assess and improve performance across all commercial plans.

3.2. Develop recommendations for standardized/comparable and validated Quality Improvement measures (beyond HEDIS measures) that assess and evaluate both quality of care and outcomes associated with care. Formulate recommendations for data specifications for electronic medical records to ensure that asthma-related measures can be captured.

3.3. Facilitate use of standardized/comparable and validated Quality Improvement measures (beyond HEDIS) by public and private health care delivery and payer systems to assess, improve and sustain the provision of high quality asthma care within and across systems.

3.4. Develop incentive and reward structures that encourage quality asthma care.

4. Ensure seamless/integrated asthma care and enhance communication between primary care providers, emergency departments/urgent care centers, hospital inpatient settings, and community settings within public and private health care delivery systems.

4.1. Facilitate the use of chronic disease case registries in primary care to improve case finding, patient monitoring and to track improvement.

4.2. Facilitate the establishment and improvement of mechanisms to support timely sharing of patient data between primary care providers, emergency departments, urgent care centers, and hospital inpatient settings – including mechanisms for primary care provider notification of emergency/urgent care treatment and completeness of patient discharge instructions.

4.3. Facilitate the establishment and improvement of mechanisms to support communication between primary care providers and community settings - including mechanisms to share patient pharmacy utilization and to improve communication between primary care providers and schools, child care centers, other institutional settings such as mental health facilities and prisons, and foster care settings.

[1] Currently the California Department of Health only requires it's contracted Medicaid managed care plans to submit audited HEDIS data.

5. Improve asthma knowledge and competency of health care practitioners, allied health professionals and community health workers, with a high priority on those serving underserved populations.

5.1. Increase the number of physicians and nurses who complete nationally or state recognized asthma training programs, with a high priority on those serving underserved populations.

5.2. Work with California Medical Colleges and residency programs to integrate education about consensus standards of asthma care into the physician training curriculum.

5.3. Work with the Department of Corrections and Rehabilitation to ensure that all prison health care providers are aware of consensus standards of asthma care to provide appropriate clinical asthma care for youth offenders and inmates (Goal 3: Objective 1)

5.4. Increase the number of Certified Asthma Educators (CAE) in California, with a high priority on those serving underserved populations. Encourage public and private health care payers to reimburse for patient education provided by Certified Asthma Educators.

5.5. Establish a State Community Health Worker certification exam on patient asthma education. Encourage public and private health care payers to reimburse for the services of Community Health Workers who have a current certification.

5.6. Create opportunities for health care providers to share knowledge, experiences, and best practices, including establishing a statewide internet portal to create an on-line community on asthma care, collaborative quality improvement learning networks, and sponsoring asthma research symposiums for health care providers.

6. Increase access to high quality asthma care for underserved populations in California by implementing best practice policies and strategies to reduce the following barriers to care: cost, cultural, linguistic, and location/distance.

6.1. Support legislative and policy initiatives that expand or guarantee health care and drug coverage for all Californians.

6.2. Convene representatives within public and private sectors at state and local levels to develop a set of recommended best practices for improving cultural, linguistic and geographic access to care for chronic conditions including asthma. Facilitate the implementation of the recommendations.

Side Bar A - NAEPP Key Clinical Activities for Asthma

Side Bar B - Comprehensive Care Management for Asthma:

Includes case management or care coordination, self-management education, in-home environmental assessments, access to management and prevention supplies (e.g. inhaler spacers, pillow/mattress encasements, etc.).

Tracks patients over time in a series of preventive clinic visits.

Uses multidisciplinary asthma care teams consisting of a physician/nurse practitioner, a clinical care coordinator (typically a registered nurse or respiratory therapist), and a community health care worker, health educator or public health nurse.

Potential Side Bars:

- Care Model (side bar or graphic) http://www.improvingchroniccare.org/change/model/expandedmodel.htm
- Health Information Technology (side bar or in background text for goal statement)

Potential Graphics:

- Care Model (side bar or graphic) http://www.improvingchroniccare.org/change/model/expandedmodel.htm

GOAL 4: Indoor Environments

Goal statement

All communities in California will benefit from schools, childcare centers, workplaces, homes and institutional facilities that:

1. Meet the needs of those with asthma; and
2. Provide indoor air, and adjacent environments, where allergens and irritants that cause or exacerbate asthma are substantially reduced or eliminated.

Schools

Objectives and Strategies

1. Increase the number of qualified school health personnel in schools and school districts to better meet the needs of students with asthma.

1.1. Improve the nurse to student ratio in all California school districts to more closely approach the recommended 1/750 nurse to student ratio.[2]

1.2. Promote the use of trained, certified health assistants and community health workers in school districts unable to achieve the optimal 1/750 nurse to student ratio.

1.3. Work with the School Health Centers Association to ensure that existing and future School Based Health Centers provide comprehensive, high quality asthma care, consistent with consensus standards of care established in Objective 2; including acute and emergency care for all students with asthma.

1.4. Promote the use of consulting community physicians within every school district to provide advice on appropriate school management of asthma and other medical conditions.

2. Establish and implement comprehensive asthma policies and procedures in school districts to ensure the health and well-being of students with asthma.

2.1. At the state level, promote the development of a comprehensive set of model asthma policies and procedures for school districts based on best practices in the field and best practice guidelines. (Side Bar A)

2.2. At the district level, promote the establishment and implementation of comprehensive model asthma policies and procedures. Assess their effectiveness and work to improve them.

[2] The National Association of School Nurses recommends a nurse per every 750 students. The following organizations recommend a nurse in every school: Centers for Disease Control and Prevention, the National Lung Blood Health Institute, the American Academy of Pediatrics, the American School Health Association.

2.3. Develop methodologies and procedures for assessing school district compliance with existing and future asthma related laws.

3. Institute district-wide trainings on asthma and indoor environmental quality for school and district personnel on a regular basis - including health personnel, administrators, teachers, administrative assistants, coaches, maintenance and facility personnel, and bus drivers.

3.1. Integrate asthma and indoor environmental quality training into professional development days at the start of the school year, professional development institutes, and/or other venues.

3.2. Use best practice asthma and indoor environmental quality training curricula and tool kits. Explore the potential to develop an e-curriculum on asthma with credits attached to it.

4. Establish and implement comprehensive policies and procedures in school districts to ensure a healthy indoor environment for students and staff.

4.1. Increase maintenance and facility staffing levels in school districts to approach the levels recommended by the CA Association of School Business Officials.

4.2. Support efforts to identify and develop adequate stable, long-term funding for school construction, renovation and preventive maintenance in a manner that ensures optimal indoor environmental quality.

4.3. At district and school levels, help to establish and implement an "Indoor Air Quality Management Plan" to prevent and manage indoor air quality problems in schools, using best practice guidelines and tools (Side Bar B).

4.4. At the district level, encourage adoption of best practices for the design, construction and renovation of schools that ensure optimal indoor environmental quality, using best practice guidelines and tools.

5. Establish and implement policies and procedures in school districts to minimize exposure to contaminated outdoor air and to promote a safe and healthy outdoor school environment.

5.1. Develop and promote guidelines on allergen-free or low-allergen landscaping practices for schools and child care settings. Encourage school districts to adopt the guidelines.

5.2. At the district level, establish and implement a policy for managing bad air days for children with respiratory diseases and all children, using best practice guidelines and tools.

5.3. Encourage school districts to eliminate or reduce exposure to diesel exhaust at school sites through purchasing new school bus fleets and/or retrofitting existing fleets with the latest clean vehicle and/or low-emissions technologies and monitoring the implementation of California law (CA Airborne Toxic Control Measure 2003) regarding the school bus idling and other idling near schools and school-related stops.

5.4. Ensure new schools are "sited" on proper grading and as far as possible from sources of outdoor air pollution such as freeways, busy roads and stationary pollution sources, in accordance with state law and using research-based health recommendations. (Senate Bill 352)

6. Ensure that laws and regulations for schools adequately address asthma and indoor environmental quality issues.

6.1. Evaluate existing laws and regulations to determine their adequacy to address asthma and indoor environmental quality issues in schools. Recommend changes and new laws\regulations as appropriate.

6.2. Ensure that school districts meet all laws and regulations relevant to asthma and indoor environmental quality.

Side Bar A - Asthma Policies and Procedures

Identify and track students with chronic diseases, including students with diagnosed asthma

Solicit and use individualized asthma action plans for students with diagnosed asthma

Institute standard emergency protocols for students in respiratory distress

Ensure all students have immediate access to asthma medications as prescribed by their health care provider; approved by their parents\guardians, and according to state law

Ensure safe and healthy indoor environments for students and staff

Manage bad air days for students with respiratory diseases and all students

Facilitate ongoing communication between the school, the student's medical provider, and the parents\guardians of the student with asthma.

Side Bar B - Key Components of an Indoor Air Quality (IAQ) Management Plan

Appoint an IAQ manager and or\form a team

Establish a regular schedule of "self assessments" of basic safety and health conditions in schools via school walk throughs and checklists for school personnel and utilize findings to take corrective and preventive action

Ensure HVAC systems are thoroughly cleaned and inspected annually

Educate school personnel and facility and maintenance staff about indoor air quality
Implement procurement policies for safe and healthy products and services that assure good IAQ

Implement Integrated Pest Management programs

Ensure that all school buildings meet all relevant State regulations, including those related to operation and maintenance

Goal 4: Indoor Environments (continued)

Goal Statement

All communities in California will benefit from schools, childcare centers, workplaces, homes and institutional facilities that:

1. Meet the needs of those with asthma; and
2. Provide indoor air, and adjacent environments, where allergens and irritants that cause or exacerbate asthma are substantially reduced or eliminated.

Child Care

Objectives and Strategies

1. Raise public awareness of the right of all children with asthma to enroll in licensed child care centers and family homes and to be assured a healthy and supportive child care environment. (Side Bar B)

1.1. Raise awareness of the legal protections afforded to children with asthma under the Americans with Disabilities Act (ADA) and the CA Unruh Civil Rights Act with regards to child care.

1.2. Raise awareness of California law (H&SC 1596.798) which enables child care providers to administer prescribed inhaled medications to children as long as specific criteria are met.

2. Increase the availability of Child Care Health Consultants, health personnel and technical assistance resources to help child care centers and family child care homes manage asthma.

2.1. Increase the number of Child Care Health Consultants and ensure their presence in all counties as a training and technical assistance resource for licensed child care facilities.

2.2. Increase the number of nurses in local Child Development Programs administered by the CA Department of Education to more closely approach the widely recommended 1/750 nurse to student ratio.

2.3. Establish linkages between the childcare community and the health care community to provide, clinical consultation services as needed.

2.4. Promote services or projects to help facilitate the integration of children with special needs, including asthma, into child care (e.g. Child Care Inclusion Challenge Project in San Francisco).

3. Work with child care centers and family child care homes to establish and implement asthma policies and procedures to ensure the health and well-being of children with asthma.

3.1. At the state level, develop and promote guidelines and training on the management of asthma in child centers and family child care homes. Include an addendum with a comprehensive set of model policies and procedures. (Side Bar C)

3.2. At local and state levels, work with child care centers and family child care homes to establish and implement model asthma policies and procedures. Assess the effectiveness of the policies and procedures and improve them.

4. Work with child care centers and family child care homes to establish and implement policies and procedures to ensure a healthy indoor environment for children and child care providers.

4.1. At the state level, develop and promote guidelines on indoor environmental quality in child care centers and family child care homes. Include an addendum with a set of model policies and procedures.

4.2. At local and state levels, work with child care centers and family child care homes to establish and implement indoor environmental quality policies and procedures. Assess the effectiveness of the policies and procedures and improve them.

4.3. Support the development of a child care facilities loan fund/deferred maintenance fund to provide financing/funding for renovations and deferred maintenance to resolve urgent environmental health and safety issues.

4.4. Implement Integrated Pest Management Programs in licensed child care centers, as per law AB 2865 and the CA School Integrated Pest Management Program.

4.5. Develop and promote outreach material on options available to child care facilities which are located in rental properties that suffer from environmental health and safety issues.

5. Ensure a safe and healthy outdoor environment surrounding child care facilities.

5.1. Develop and promote guidelines on allergen-free or low-allergen landscaping practices for the school and child care settings.

5.2. Work with child care centers and family child care homes to establish and implement a policy for managing bad air days for children with respiratory diseases and all children, using best practice guidelines and tools.

5.3. Consider the development of guidelines for siting of new licensed child care centers as far as possible from sources of outdoor air pollution such as freeways, busy roads and stationary pollution sources (similar to existing regulations for new school construction).

6. Work with Community Care Licensing to ensure that laws and regulations for licensed child care facilities adequately address asthma-related and indoor environmental quality issues.

6.1. Evaluate existing laws and regulations to determine their adequacy to address asthma-related and indoor environmental quality issues in licensed child care facilities. Recommend changes and new laws/regulations as appropriate.

6.2. Ensure that licensed child care centers and family child care homes meet all relevant laws and regulations. Expand support resources to help licensed child care facilities comply.

Side Bar A – Types of Child Care

There are two types of child care: licensed child care (child care centers and family child care homes) and license-exempt child care (which includes an array of child care settings exempted from a license). Both types of child care are referenced in this plan. It should be assumed that all references to child care centers and family child care homes in the plan include private as well as public child care facilities.

[License-exempt child care includes: Relative Care, Cooperative Care, Care for One Family, Public Recreation Programs, Extended Day Care, Parents-On-Site Child Care, Nanny Care, Parents in School or Adult Education Child Care, Instructional Child Care, and Activities Based Child Care.]

Side Bar B – Legal Protections Afforded to Children with Asthma

Children with asthma are protected under the Americans with Disabilities Act. Chronic breathing problems are considered a disability. Under the ADA, children with asthma cannot be excluded from child care on the basis of their disease and child care providers must accommodate the needs of a child with asthma in their care. Exceptions to this law can be made in cases that involve significant difficulty and expense. *Check for accuracy*

If the criteria in California law H&SC 1596.798 are met, child care facilities cannot refuse a reasonable request to administer prescribed inhaled medication to a child with asthma given the legal protections afforded to that child under the ADA. *Check for accuracy*

Side Bar C – Asthma Policies and Procedures

Identify and track children with chronic diseases, including students with diagnosed asthma.

Solicit and use individualized asthma action plans for children with diagnosed asthma upon their enrollment and annually or as revised thereafter.

Institute standard emergency protocols for children in respiratory distress.

Ensure all children have immediate access to asthma medications as prescribed by their health care provider approved by their parents/guardians, and according to state law.

Ensure safe and healthy indoor environments for children and staff.

Manage bad air days for children with respiratory diseases and all children.

Facilitate *on-going communication* between the child care center/ family child care home, the child's medical provider, and the parents/guardians of children with asthma.

Goal 4: Indoor Environments (continued)

Goal Statement

All communities in California will benefit from schools, childcare centers, workplaces, homes and institutional facilities that:

1. Meet the needs of those with asthma; and
2. Provide indoor air, and adjacent environments, where allergens and irritants that cause or exacerbate asthma are substantially reduced or eliminated.

Institutional and Other Community Settings

Foster Care Objectives and Strategies

1. Work with the Foster Care Branch (in Children and Family Services Division) and Community Care Licensing (in the California Department of social Services) to ensure that all foster providers (including group homes) and foster care public health nurses receive necessary asthma education to support foster children with asthma.

1.1. Provide basic asthma education, including prevention, management, and recognition of poorly controlled asthma. Include information about asthma standards of care (Goal 3; Objective 1.4)

1.2. Provide access to educational materials and resources for the identification and reduction of indoor asthma triggers.

1.3. Provide all foster care providers and foster care public health nurses with basic information about recognizing undiagnosed asthma in children.

2. Ensure that all children living in foster care are not exposed to tobacco smoke.

Prisons, Nursing Homes, Mental Health and Other Institutions Objective and Strategy

1. Support efforts to improve indoor environmental quality in these institutions by working with respective authorities.

1.1. Assess current monitoring or regulatory standards for air quality and mitigation of asthma exacerbations in institutional and group living facilities; identify any needed improvements and recommend actions for these improvements.

Goal 4: Indoor Environments (continued)

Goal Statement

All communities in California will benefit from schools, childcare centers, workplaces, homes and institutional facilities that:

1. Meet the needs of those with asthma; and
2. Provide indoor air, and adjacent environments, where allergens and irritants that cause or exacerbate asthma are substantially reduced or eliminated.

Homes\Housing

Objectives and Strategies

1. Develop and promote standards, guidelines and model policies for asthma-safe healthy housing that minimize indoor environmental risk factors that contribute to asthma.

1.1. Identify, develop and promote standards or guidelines for the design, construction, renovation, and maintenance of asthma-safe healthy housing.

1.2. Identify, develop and promote a set of model policies for apartments, condominiums, and other multi-unit housing developments for asthma-safe healthy housing. These might include policies on tobacco-free spaces, Integrated Pest Management, Environmentally Preferred Products and Services, allergy-free or low-allergen landscaping, resilient/smooth surface flooring, etc.

2. Work with local Housing Authorities and affordable housing agencies to reduce indoor environmental risk factors in housing that contribute to asthma.

2.1. Work with local Housing Authorities and affordable housing agencies to encourage them to have adequate staffing and infrastructure to identify and remediate indoor environmental risk factors. (Side Bar A)

2.2. Work with these agencies to adopt and implement the standards, guidelines and model policies referred to in Objective 1.

2.3. Support the development of affordable housing that incorporates quality standards for ensuring clean indoor and outdoor environments.

3. Educate stakeholders in the housing industry about indoor environmental risk factors in housing that contribute to asthma and ways to reduce these risk factors.

3.1. Identify, develop, and promote training and outreach materials on asthma, indoor environmental quality, and housing rights for tenants with asthma. Tailor materials to various key stakeholder groups including property owners and managers, maintenance/facilities personnel, developers, builders, architects, insurers, and lenders in the housing industry.

4. Educate tenants and home owners with asthma about environmental risk factors in housing that contribute to asthma and ways to reduce these risk factors.

4.1. Identify, develop and promote education materials for tenants and home owners about indoor environmental risk factors, ways to reduce these risk factors, and housing rights for tenants with asthma.

4.2. Work with public housing and affordable housing programs to distribute the aforementioned education materials to tenants upon acceptance into their programs.

5. Expand in-home environmental assessment and legal advocacy resources for people with asthma who need outside assistance to help resolve indoor environmental issues.

5.1. Expand in-home environmental assessment programs for individuals with persistent or high risk asthma.

5.2. Increase legal advocacy services and programs for tenants with asthma who live in unhealthy housing conditions.

5.3. Develop and promote outreach materials for medical providers to assist patients with housing requests, such as a "physician verification letter".

6. Mitigate exposure to major sources of outdoor air pollution in and around housing as a critical component to ensuring asthma-safe healthy housing.

6.1. Develop and promote guidance on allergen-free or low allergen landscaping.

6.2. Reduce major sources of pollution near high-density housing communities.

6.3. For multi-unit housing developments, promote design practices and technologies that reduce indoor exposure to nearby sources of outdoor air pollution, such as freeways, busy roads and stationary sources.

6.4. Promote healthy and sustainable land use planning and community development.

7. Work with planning, building inspection, or other appropriate departments to ensure that laws adequately address environmental risk factors in housing to contribute to asthma

7.1. Assess existing codes to determine the adequacy of the codes to address the environmental risk factors in housing that contribute to asthma. Recommend changes to existing codes and/or develop new codes as needed.

7.2. Work with appropriate departments to develop a package of "model codes" that local counties can enact.

7.3. Assess and strengthen the enforcement of codes as needed. Ensure State and local governments have adequate infrastructure and funding for enforcement.

Side Bar A

Healthy indoor environmental quality in Housing Authority and affordable housing properties is facilitated by appropriate staffing levels; staff training; inspection and remediation policies, procedures and tools; quality assurance mechanisms; work order communication protocols; work order database systems (including the ability run queries related to environmental risk factors); tenant education; and tenant grievance procedures.

Goal 4: Indoor Environments (continued)

Goal Statement

All communities in California will benefit from schools, childcare centers, workplaces, homes and institutional facilities that:

1. Meet the needs of those with asthma; and
2. Provide indoor air, and adjacent environments, where allergens and irritants that cause or exacerbate asthma are substantially reduced or eliminated.

Workplace

Objectives and Strategies

1. Improve data collection, surveillance, and evaluation of data related to Work Related Asthma (WRA), and ensure data are used for prevention

1.1. Maintain statewide surveillance for WRA

1.2. Identify ways to increase reporting of WRA by health care providers as required. (Labor code Section 6409(a)

1.3. Expand surveillance to include new data sources outside existing reporting systems by quantifying and characterizing populations of workers that are not in the current surveillance system and by supporting validation and evaluation measures of potential new data sources.

1.4. Utilize surveillance data to focus prevention efforts by identifying high risk industries, occupations, worksites and exposures.

1.5. Increase access and usefulness of WRA surveillance data by preparing and disseminating annual reports on current prevalence and trends, and developing and providing workplace asthma surveillance tables via a searchable data base on the web.

2. Develop and implement strategies to prevent WRA

2.1. Promote the identification of asthmagenic potential in each specific workplace and promote effective interventions for WRA in targeted industries by implementing work site evaluations and exposure assessments, and instituting and evaluating interventions with select employers

2.2. Promote the use of hierarchy of controls, including the substitution of sensitizers and asthma triggering substances with less asthmagenic substances, engineering controls, administrative controls, and as a last resort, appropriate use of personal protective equipment

2.3. Promote the development of Illness and Injury Prevention Programs that include asthma prevention, medical surveillance and encourage the reporting of WRA

2.4. Encourage prevention in specific industries by providing benefit analysis to employers and develop corporate social responsibility guidelines on asthma for use in the private sector.

2.5. Work with OSHA to include asthmagenic potential and respiratory sensitization in standard setting and train Cal/OSHA staff on how to include respiratory sensitization in their worksite assessments

2.6. Implement collaborative prevention efforts in the community and the workplace by identifying public spaces that are also workplaces (e.g. hospitals, schools, public transportation, government buildings, parks and recreational lands) and developing strategies that address occupational and environmental exposures.

2.7. Provide information on asthma and asthma risk factors to the self- employed work force such as house cleaners and day laborers.

2.8. Improve compliance with workplace smoking ban (Labor code Section 6404.5)

2.9. Support efforts to reduce asthma irritants (e.g. perfumes, scented cleaning agents, chemical food scents, etc.) in the workplace through targeted information to employers and employee groups.

3. Increase awareness and knowledge about Work Related Asthma (WRA) and its prevention among health care providers, employers, workers and communities

3.1. Identify existing education opportunities targeted to **health care providers** and assess whether and how to incorporate information on WRA. Information in materials and trainings could include the following: asthmagenic exposures in the workplace, guidelines and tools for evaluation and diagnosis of WRA, reporting requirements for workplace illness, and resources for WRA, among others.

3.2. Conduct outreach and education directed at **workers** in high risk industries, occupations, worksites and exposures that are identified through surveillance data.

3.3. Encourage the development and utilization of already existing resources (e.g. employee health clinics) in the workplace for outreach and education to **workers** regarding WRA

3.4. Develop and distribute linguistically and culturally appropriate educational materials on WRA for **workers**, including workers reported to the WRA surveillance system and migrant workers in the agricultural industry, among others.

3.5. Collaborate with unions, work centers and other labor oriented sites to distribute materials and conduct training about WRA to **workers**.

3.6. Identify and prioritize **employers** based on high risk industries, occupations, worksites and exposures identified through surveillance.

3.7. Develop and disseminate information to identified **employers** on known asthma triggers/causes and their prevention.

3.8. Utilize existing outreach channels such as trade organization newsletters and publications to publicize information about WRA, interventions, and to collaborate on trainings for **employers.**

3.9. Collaborate with other agencies, organizations, coalitions, health centers, schools, and non-governmental organizations working to develop outreach and education efforts about asthma and its prevention and to address asthma disparities in the **community.**

Goal 5: Outdoor Environment

Goal Statement

A healthy and safe outdoor environment will exist for all California, with particular focus on optimizing respiratory health.

Objectives and Strategies

1. Support the use of Public Health Impact Assessments in community development plans, and ensure that asthma is included

1.1. Assist with the development and improvement of asthma indicators in Health Impact Assessments.

2. Ensure public awareness, participation and transparency in public policy decisions affecting outdoor environments and their relationship to respiratory health.

2.1. Cultivate leadership in the affected populations by identifying and partnering with current asthma champions and working with existing coalitions.

2.2. Conduct a public education campaign with consistent messages related to asthma and the outdoor environment, including recommendations for appropriate individual or institutional action in relation to the Air Quality Index (AQI).

3. Target the elimination of disproportionate exposure to outdoor air pollution among specific groups or communities.

3.1. Systematically identify communities that are disproportionately affected by industrial pollution, mobile source pollution and pollution from agricultural practices due to their proximity to the sources of pollution.

3.2. Develop coordinated strategies and target resources to address the overexposure of identified communities through research efforts, development of interventions, raising awareness, support of community coalitions, and policy efforts focused on elimination of identified disparities.

4. Reduce pollution sources related to the goods movement industries

4.1. Identify and report on environmental, social and health costs related to the goods movement.

4.2. Support policy that reduces the pollution from port activity including emissions from ships, trains, trucks and yard equipment at ports, rail yards, and distribution centers and on heavily trafficked freeways

4.3. Support and strengthen air quality improvement plans at the ports of Los Angeles, Long Beach and Oakland using a range of enforcement mechanisms including economic assessments, fees and penalties.

5. Reduce diesel emissions from mobile and stationary sources

5.1. Enforce policy to reduce bus, truck, ship and train idling

5.2. Encourage the development of efficient and lower polluting truck and public transit routes

5.3. Support efforts to re-engineer or upgrade city fleets, construction vehicles school buses, and heavy off road vehicles**.** Encourage schools and school districts to use low-emission buses and vehicles and abide by laws and guidelines such as the Environmental Protection Agency Clean School Bus USA guidelines.

6. Support transportation and land use plans and policies that reduce car use and increase use of public transportation, bicycles and walking

6.1. Support policies that provide incentives for ridesharing and develop model policies for workplaces, schools, and employers to support car pooling, mass transit use, bicycling or walking.

6.2. Develop partnerships with groups and agencies that promote pollution reducing transportation plans and encourage partnerships that support and influence use of resources to expand bicycling\walking options for activities of daily life

6.3. Support rigorous emission standards for all motor vehicles

6.4. Work with the State and Consumer Services Agency, ARB, and local and regional air districts to identify activities and vehicles that are heavy emitters, and to prioritize, and regulate with best available technology.

6.5. Support public reporting of vehicles and activities that are suspected of emission violations.

7. Support efforts that increase use of alternative energy sources

7.1. Reduce production of sulfur dioxide from diesel by supporting transition to vehicles that are ultra low sulfur diesel (ULSD)

7.2. Support community efforts to adopt public transportation plans that utilize “green technology” and “clean energy” vehicles that produce low levels of air pollutants.

7.3. Promote and support use of solar energy.

7.4. Support strategies such as use of biodiesel, carbon tax, greenhouse gas offset purchases, use of appliances that are energy efficient (Energy Star).

7.5. Discourage use of wood burning stoves and fireplaces through ordinances and public education

7.6. Support transition of commuter trains to low-polluting locomotive engines

8. Reduce exposure to specific criteria air pollutants, including particulate matter less than or equal to 2.5 micrometers, NO2 and ozone.

8.1. Support efforts to attain the National and State Ambient Air Quality Standards (NAAQS) for ozone, NO2 and particulate matter

8.2. Promote consistent state and local policies to communicate and respond to unhealthy Air Quality Index

9. Reduce emissions from stationary industrial sources

9.1. Partner with appropriate agencies to ensure identification of polluting industries and compliance with environmental laws

9.2. Support policy that reduces industrial pollution from major stationary sources of air pollution

10. Reduce exposures to asthma triggers related to agricultural practices

10.1. Increase dust control measures with particular attention to no-till policies, pesticide exposures and seasonal influences such as harvest time.

10.2. Encourage alternative farming practices such as incentives for no-till; IPM or organic farming

10.3. Support research focused on identifying the pesticides in high use that can cause or exacerbate asthma and alternatives to use of pesticides.

10.4. Decrease exposure to particulates by decreasing agricultural burning and re-examining forest burning practices.

10.5. Support mandatory notification of pesticide use (Healthy Schools act of 2000 (Assembly Bill 2260 and in the Education Code- sections 17608-17613), agricultural burning, etc. for schools and adjacent housing and other facilities to allow for protection of people in those areas with asthma. Support consistent enforcement of notification.

10.6. Support efforts to create transparency in decision making regarding roles and responsibilities of public officials (for example, the position of air pollution control officers and agricultural commissioners in counties being held by the same person).

11. Decrease exposure to second hand smoke by promoting policy efforts to reduce smoking prevalence, access to tobacco by minors, and ban outdoor cigarette smoking adjacent to public buildings, in public spaces and adjacent public transit areas.

12. Promote allergen-free and low allergen landscaping around public and private properties.

12.1. Identify the asthma triggers associated with landscaping (for example, pollen as major organic\biologic trigger) and promote asthma-safe alternatives

12.2. Increase the capacity\numbers of people who have the skills and knowledge to evaluate landscapes and to redesign them so they are low allergy landscapes

12.3. Ensure that State properties, schools, hospitals, convalescent homes, medical centers, parks and public spaces have allergy-free or low pollen landscaping.

12.4. Endorse a pollen control ordinance by the state

13. Support research and dissemination of findings about the connection between asthma and global warming and the need for reduction of greenhouse gases

14. Develop partnerships and capitalize on opportunities for synergy with other organizations and their efforts on issues such as urban planning, and sustainable farm practices, obesity, diabetes and tobacco control initiatives, among others.

15. Decrease exposures to asthma triggers in the outdoor workplace

15.1. Identify and target outdoor workplaces that have the potential for causing or exacerbating asthma

15.2. Support policy efforts aimed at reduction of exposures to asthma triggers in identified outdoor workplaces (decrease dust, pesticide exposures, truck and bus idling, landscape)

16. Improve communication between Air Quality Management Districts (AQMD's) and the communities that they serve

16.1. Support consistent policies for all AQMD's in relation to air quality monitoring, issuing air alerts in response to unhealthy AQI, and methods for alerting the public to poor air quality

16.2. Support consistent statewide policies for enacting "spare the air" days and funding for free public transportation on affected days

16.3. Support developing funding for adequate air monitoring station capability in all AQMD's that includes population areas impacted by asthma disparities